### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference W1796-000000		FOR FURTHER ACTION	See Form PCT/IPEA/416				
Internatio	nal application No.	International filing date (day/month	/year) Priority date (day/month/year)				
PCT/JP2004/009841		09.07.2004	11.07.2003				
International Patent Classification (IPC) or national classification and IPC							
C08B30/12, A23K1/16, A23L1/0522, A61K9/20, 47/36							
Applicant Asahi Kasei Chemicals Corporation							
	<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>						
2.	This REPORT consists of a total of	4 sheet	ts, including this cover sheet.				
3.	This report is also accompanied by A	NNEXES, comprising:					
a. (sent to the applicant and to the International Bureau			f 5 sheets, as follows:				
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.						
	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))						
	_						
	, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4.	This report contains indications relati	ng to the following items:					
	Box No. I Basis of the	report					
	Box No. II Priority						
	Box No. III Non-establi	shment of opinion with regard to nov	elty, inventive step and industrial applicability				
	Box No. IV Lack of uni	ty of invention					
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
	Box No. VI Certain documents cited						
	Box No. VII Certain defe	ects in the international application					
	Box No. VIII Certain obs	observations on the international application					
Date of su	ubmission of the demand	Date of comp	letion of this report				
Name and	d mailing address of the IPEA/JP	Authorized o	fficer				
Facsimile	· No	Telephone No	Telephone No.				

Translation



### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/009841

Box	No. I	Basis of the report			
1.		regard to the language, this report is based on the internation ated under this item.	nal application in the language in v	which it was filed, unless otherwise	
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:  international search (Rule 12.3 and 23.1(b))  publication of the international application (Rule 12.4)				
		international preliminary examination (Rule 55.2 and/o	or 55.3)		
2.	recei	n regard to the elements of the international application, this is iving Office in response to an invitation under Article 14 are report):  the international application as originally filed/furnished the description:  pages 1-5, 8-33	report is based on (replacement s. referred to in this report as "or	heets which have been furnished to the riginally filed" and are not annexed to and are not annexed to an are not annexed to a configurable filed/furnished	
			received by this Authority on	28.04.2005	
		pages*			
	$\boxtimes$	the claims:	•		
		nos. 1–6		as originally filed/furnished	
		nos.*	as amended (together	with any statement) under Article 19	
		nos.* 7,8,11-13	received by this Authority on	·	
		nos.*			
	$\square$	the drawings:			
	لات	sheets Fig. 1-12		as originally filed/furnished	
		sheets*	received by this Authority on		
		sheets*	•		
		a sequence listing and/or any related table(s) – see Supplement		isting.	
_				~ <b>~</b>	
3.		The amendments have resulted in the cancellation of:			
		the description, pages			
		the claims, nos. 9,10			
		the sequence listing (specify):			
	_	any table(s) related to sequence listing (specify):	manta conservad a state of the	licted below had not been and all a	
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fil	led, as indicated in the Supplemen	tal Box (Rule 70.2(c)).	
		the description, pages			
	the claims, nos.				
		the drawings, sheets/figs			
	the sequence listing (specify):				
	any table(s) related to sequence listing (specify):				
*	lf ite	em 4 applies, some or all of those sheets may be marked "supe	erseded."		



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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement				
	Novelty (N)	Claims 1-8, 11-13 YES			
	Inventive step (IS)	Claims 1-8, 11-13 YES Claims NO			
	Industrial applicability (IA)	Claims 1-8, 11-13 YES			
2.	Citations and explanations (Rule 7	Citations and explanations (Rule 70.7)			
	Documents cited	in the international search report			
		10-195104 A (Nihon Shokuhin Kako Co.,			
	Document 2: JP	7-25902 A (Sanwa Kosan Co., Ltd.), 27			
		uary 1995 4-130102 A (Sanwa Kosan Co., Ltd.), 1 May			
	Document 4: JP	6-254602 A (Nippon Starch Chemical Co.,			
		8-143602 A (Shimada Chemical Co., Ltd.),			
		4-318001 A (Asahi Chemical Industry Co., .), 9 November 1992			
		57-5700 A (Asahi Chemical Industry Co., .), 12 January 1982			
	Claims 1-8 and 1	11-13)			
	The inventions set forth in claims 1-8 and 11-13 are				
	not disclosed in	documents 1-7 and could not be conceived			
	easily from any of these documents.				
	Therefore,	claims 1-8 and 11-13 involve an inventive			

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 1-6 relate to functional starch powder which has a water-holding capacity of 400% or more, a collapse time of 5 hours or more and a gel indentation load of 200 g or more; however, the only such powder disclosed in the sense of PCT Article 5 is the functional starch powder presented in the examples, etc., made by a method described in claims 7, 8, 11 and 12, i.e. the method described in claim 13, starting from potato starch; and there is no technical basis for extending this to all other functional starch powders which have a water-holding capacity of 400% or more, a collapse time of 5 hours or more and a gel indentation load of 200 g or more.

Therefore, claims 1-6 are deemed not to be fully supported by the description in the sense of PCT Article 6.